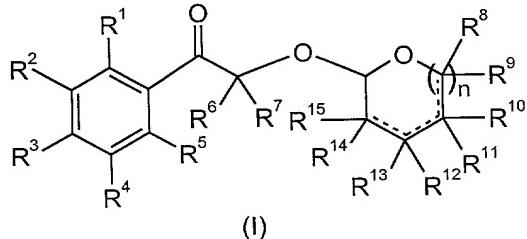


WHAT IS CLAIMED IS:

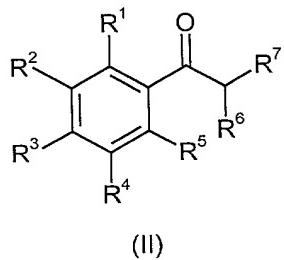
1. A fragrance precursor of formula I:



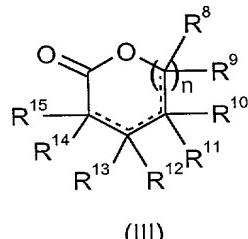
5

wherein the dotted lines indicating one or two optional double bonds in the cyclic acetal,

that forms a fragrant ketone of formula II:



10 and a fragrant lactone of formula III:



containing not more than 20 carbon atoms,

wherein

R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or  
15 branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form

together one or two aliphatic or aromatic rings, these rings may optionally contain linear or branched C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms,

5 R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a carbocyclic ring optionally substituted by an aliphatic residue,

n is either 0 or 1,

10 R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one or more aliphatic or aromatic rings, these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and 15 these rings and residues may comprise one or more oxygen atoms, or

R<sup>8</sup> and R<sup>9</sup> together; R<sup>10</sup> and R<sup>11</sup> together; R<sup>12</sup> and R<sup>13</sup> together; or R<sup>14</sup> and R<sup>15</sup> together represent H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy when the ring carbon atom supporting these groups 20 is unsaturated.

2. A fragrance precursor according to claim 1 wherein n is 0, one of the residues R<sup>11</sup> to R<sup>15</sup> is an aliphatic residue having 1 to 15 carbon atoms, and the other residues are H.

3. A fragrance precursor according to claim 1 wherein in formula I n is 0, R<sup>10</sup> is an aliphatic residue having 1 to 30 15 carbon atoms and R<sup>11</sup> to R<sup>15</sup> are H.

4. A fragrance precursor according to claim 1 wherein in formula I n is 0, two or more of the residues R<sup>10</sup> to R<sup>15</sup> are aliphatic residues having 1 to 15 carbon atoms, and  
5 the other residues are H.

5. A fragrance precursor according to claim 1 wherein in formula I n is 0, and R<sup>10</sup> and R<sup>11</sup> are aliphatic residues having 1 to 10 carbon atoms.

10

6. A fragrance precursor according to claim 1 wherein in formula I n is 0, and at least two of the residues R<sup>10</sup> to R<sup>15</sup> are residues having 1 to 15 carbon atoms and form together one or more carbocyclic ring(s), which may 15 optionally be substituted with one or more aliphatic residue(s) having 1 to 10 carbon atoms.

7. A fragrance precursor according to claim 1 wherein in formula I n is 0, and R<sup>10</sup> and R<sup>11</sup> are residues having 1 to 20 15 carbon atoms and form together a ring which may be further substituted with one or more aliphatic residues having 1 to 10 carbon atoms.

8. A fragrance precursor according to claim 1 wherein in formula I n is 1, one or more of the residues R<sup>8</sup> to R<sup>15</sup> are 25 an aliphatic residue having 1 to 15 carbon atoms, and the other residues are H.

9. A fragrance precursor according to claim 1 wherein in

formula I n is 1, R<sup>8</sup> is an aliphatic residue having 1 to 15 carbon atoms, and R<sup>9</sup> to R<sup>15</sup> are H.

10. A fragrance precursor according to claim 1 wherein in  
5 formula I n is 1, at least two of the residues R<sup>8</sup> to R<sup>15</sup> are aliphatic and have 1 to 15 carbon atoms, and the other residues are H.

11. A fragrance precursor according to claim 1 wherein in  
10 formula I n is 1, and at least two of the residue R<sup>8</sup> to R<sup>15</sup> are residues having 1 to 15 carbon atoms and form together one or more carbocyclic ring(s), which may optionally be substituted with one or more aliphatic residues having 1 to 10 carbon atoms.

15

12. A fragrance precursor according to claim 1 wherein in  
formula I at least one of the residues R<sup>6</sup> and R<sup>7</sup> is H.

13. A fragrance precursor according to claim 1 wherein in  
20 formula I the residues R<sup>6</sup> and R<sup>7</sup> are H.

14. A fragrance precursor according to claim 1 wherein in  
formula I the residues R<sup>6</sup> and R<sup>7</sup> are H, and R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub> alkoxy.  
25

15. A fragrance precursor according to claim 1 wherein in  
formula I the fragrant ketone of formula II is selected from the group consisting of 1-phenyl-ethanone, 2,4-

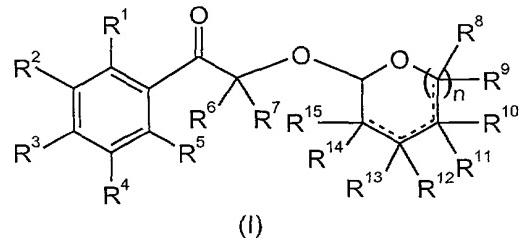
dimethylphenyl-ethanone, 1-[4-(1,1-dimethylethyl)-2,6-dimethylphenyl]-ethanone, 1-(4-tert-butyl-3,5-dinitro-2,6-dimethyl)-ethanone, and 1-(4-methoxyphenyl)-ethanone.

5 16. A fragrance precursor according to claim 1 wherein in formula I R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup>, form together one or two aliphatic or aromatic rings which may optionally contain substituted or unsubstituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues and may 10 comprise one or more oxygen atoms.

17. A fragrance precursor according to claim 1 wherein the fragrant ketone of formula II is selected from the group consisting of 1-(2-naphthalenyl)-ethanone, 4-acetyl-15 6-tert-butyl-1,1-dimethyl-indan, 1-(5,6,7,8-tetrahydro-3',5',6',8',8'-hexamethyl-2-naphthalenyl)-ethanone, 1-(5,6,7,8-tetrahydro-3',5',8',8'-pentamethyl-2-naphthalenyl)-ethanone, 1-(5,6,7,8-tetrahydro-3'-ethyl-5',5',8',8'-tetramethyl-2-naphthalenyl)-ethanone, 1-(2,3-dihydro-1',1',2',3',3',6'-hexamethyl-1H-inden-5-yl-ethanone, 1-[2,3-dihydro-1',1',2',6'-tetramethyl-3-(1-methylethyl)-1H-inden-5-yl]-ethanone, 5-acetyl-1,1,2,3,3-pentamethyl-indane, and 20 1-(5,6,7,8-tetrahydro-2-naphthalenyl)-ethanone.

25

18. A compound of formula I:



(I)

the dotted lines indicating one or two double bonds in the ring of the cyclic acetal,

wherein

R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain substituted or unsubstituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and may comprise one or more oxygen atoms,

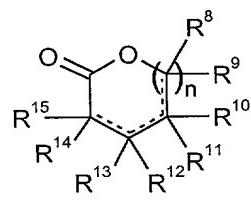
R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a substituted or unsubstituted carbocyclic ring,

n is either 0 or 1,

R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one ore more aliphatic or aromatic rings, these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and the above rings and residues may comprise one or more oxygen atoms,

and

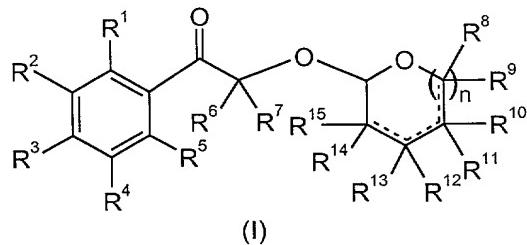
a lactone of formula III:



(III)

which contains not more than 20 carbon atoms.

19. A compound of formula I:



5 wherein

the ring of the acetal is saturated,

R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

10 R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain substituted or unsubstituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and may comprise one or more oxygen atoms,

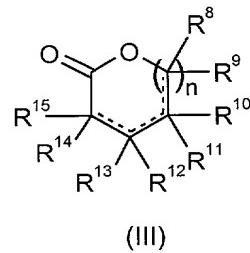
15 R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a substituted or unsubstituted carbocyclic ring,

n is 0,

20 R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one aliphatic or aromatic ring, and the ring may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and the 25 above rings and residues may comprise one or more oxygen atoms,

and

a lactone of formula III:

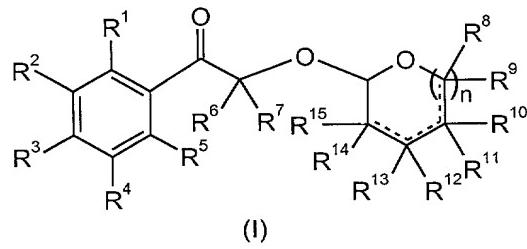


(III)

which contains not more than 20 carbon atoms.

5

20. A compound of formula I:



(I)

wherein

the ring of the acetal is saturated,

10 R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

15 R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain substituted or unsubstituted C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and may comprise one or more oxygen atoms,

20 R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a substituted or unsubstituted

carbocyclic ring,

n is 1,

R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form 5 together one or more aliphatic or aromatic rings, these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and the above rings and residues may comprise one or more oxygen atoms,

10 with the proviso that compounds

wherein

all of R<sup>8</sup> to R<sup>15</sup> are H,

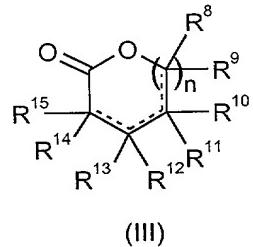
or

15 all of R<sup>10</sup> to R<sup>15</sup> are H and either R<sup>8</sup> is C<sub>6</sub> and R<sup>9</sup> is H or R<sup>9</sup> is C<sub>6</sub> and R<sup>8</sup> is H

are excluded,

and

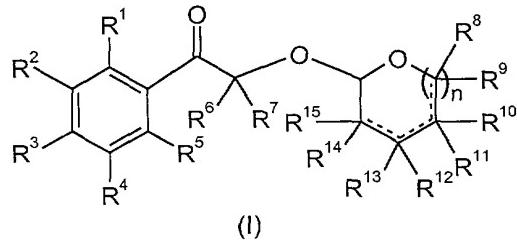
a lactone of formula III:



(III)

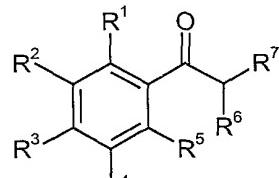
20 which contains not more than 20 carbon atoms.

21. A perfumed product comprising a fragrance precursor of formula I:



the dotted lines indicating one or two optional double bonds in the cyclic acetal,

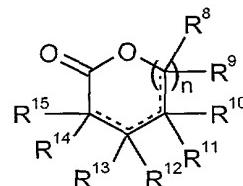
that forms fragrant ketone of formula II:



5

(II)

and a fragrant lactone of formula III:



(III)

containing not more than 20 carbon atoms,

wherein

10 R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain linear or branched C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and these

rings and residues may comprise one or more oxygen atoms,

R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a carbocyclic ring optionally substituted by an aliphatic residue,

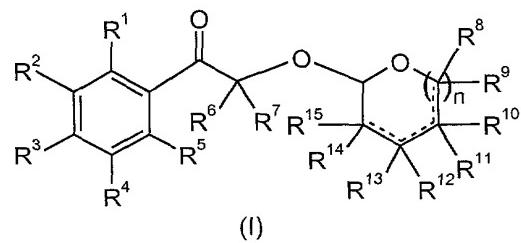
n is either 0 or 1,

R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one or more aliphatic or aromatic rings, 10 these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms.

15 22. A perfumed product according to claim 21 wherein the perfumed product is selected from the group consisting of laundry compositions, cleaning products, body care products, and personal care products.

20 23. A process for providing a fragrance to a substrate comprising:

(a) treating a substrate with a perfumed product comprising a fragrance precursor of formula I:



25 the dotted lines indicating one or two optional double

bonds in the cyclic acetal,

wherein

R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

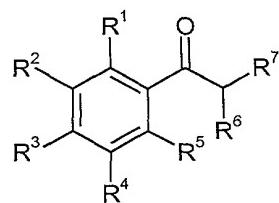
R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain linear or branched C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms,

R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a carbocyclic ring optionally substituted by an aliphatic residue,

n is either 0 or 1,

R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one or more aliphatic or aromatic rings, these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms; and

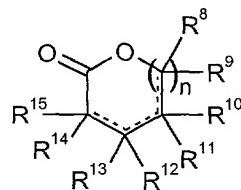
(b) allowing the compound of formula I to be cleaved to form a fragrant ketone of formula II:



25

(II)

and a fragrant lactone of formula III:



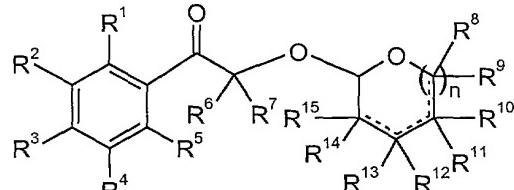
(III)

containing not more than 20 carbon atoms.

24. A process according to claim 23 wherein the compound  
5 of formula I is cleaved by exposure to light.

25. A process for providing a perfumed product comprising:

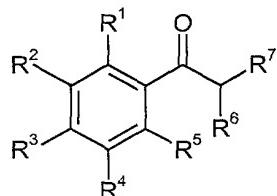
10 (a) forming a mixture by combining a base material with a compound according to formula I:



(I)

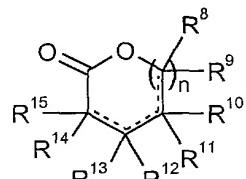
the dotted lines indicating one or two optional double bonds in the cyclic acetal,

that forms fragrant ketone of formula II:



(II)

and a fragrant lactone of formula III:



(III)

containing not more than 20 carbon atoms,

wherein

5 R<sup>1</sup> to R<sup>5</sup> represent independently H, -NO<sub>2</sub>, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

10 R<sup>1</sup> and R<sup>2</sup>, R<sup>2</sup> and R<sup>3</sup>, R<sup>3</sup> and R<sup>4</sup>, and R<sup>4</sup> and R<sup>5</sup> may form together one or two aliphatic or aromatic rings, these rings may optionally contain linear or branched C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkenyl, or C<sub>1</sub>-C<sub>4</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms,

15 R<sup>6</sup> and R<sup>7</sup> are independently H, linear or branched C<sub>1</sub>-C<sub>6</sub>-alkyl-, C<sub>1</sub>-C<sub>6</sub>-alkenyl, or C<sub>1</sub>-C<sub>6</sub>-alkynyl, and R<sup>6</sup> or R<sup>7</sup> may form with either R<sup>1</sup> or R<sup>5</sup> a carbocyclic ring optionally substituted by an aliphatic residue,

n is either 0 or 1,

20 R<sup>8</sup> to R<sup>15</sup> are independently H, branched or linear C<sub>1</sub>-C<sub>15</sub>-alkyl, C<sub>1</sub>-C<sub>15</sub>-alkenyl, C<sub>1</sub>-C<sub>15</sub>-alkynyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxy, they may form together one or more aliphatic or aromatic rings, these rings may optionally contain branched or linear C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>10</sub>-alkenyl, or C<sub>1</sub>-C<sub>10</sub>-alkynyl residues, and these rings and residues may comprise one or more oxygen atoms; and

25 (b) forming a perfumed product from the mixture.

26. A process according to claim 25 wherein the perfumed product is selected from the group consisting of laundry compositions, cleaning products, body care products, and  
5 personal care products.